

Narrowbanding: One Year to Go

Presented to the Statewide Interoperability Executive Committee

Justin Turner

Deputy Statewide Interoperability Coordinator

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Public Safety Interoperable
Communications Office

Overview



- Narrowbanding Overview
- National Progress to Date
- Status of Narrowbanding in AZ
- Meeting the Mandate
- Cost and Funding Considerations
- Moving Forward & Resource Lists

Background



- “Narrowbanding” refers to a requirement by the Federal Communications Commission (FCC) that — on or before January 1, 2013 — all existing licensees on the VHF and UHF Spectrum implement equipment designed to operate on channel bandwidths of 12.5 kHz or less or that meets a specific efficiency standard.
- After January 1, 2013, licensees not operating at 12.5 KHz efficiency will be in violation of the Commission's rules and could be subject to FCC enforcement action, which may include admonishment, monetary fines, or loss of license.
- Ultimately equipment will need to operate on bandwidths of 6.25 kHz or less. (Currently no dead-line is set.)

Requests for Waiver



- The January 1, 2013 deadline will not be extended
 - Any licensee requiring additional time must request a waiver of the deadline
- July 2011 Waiver Guidance Public Notice (DA 11-1189)
 - Waiver requests must be well-documented to meet the FCC's waiver standard and will not be routinely granted
 - Licensees should ask for only as much time as necessary to achieve compliance by a certain date in a timely fashion
 - Licensees should support waiver requests with information on system size, complexity, progress to date, proposed schedule, and funding sources
 - Regionally coordinated requests encouraged
- Licensees should have filed waiver requests before the end of 2011; we encourage informal contact with the Public Safety and Homeland Security Bureau ASAP.

Potential Consequences



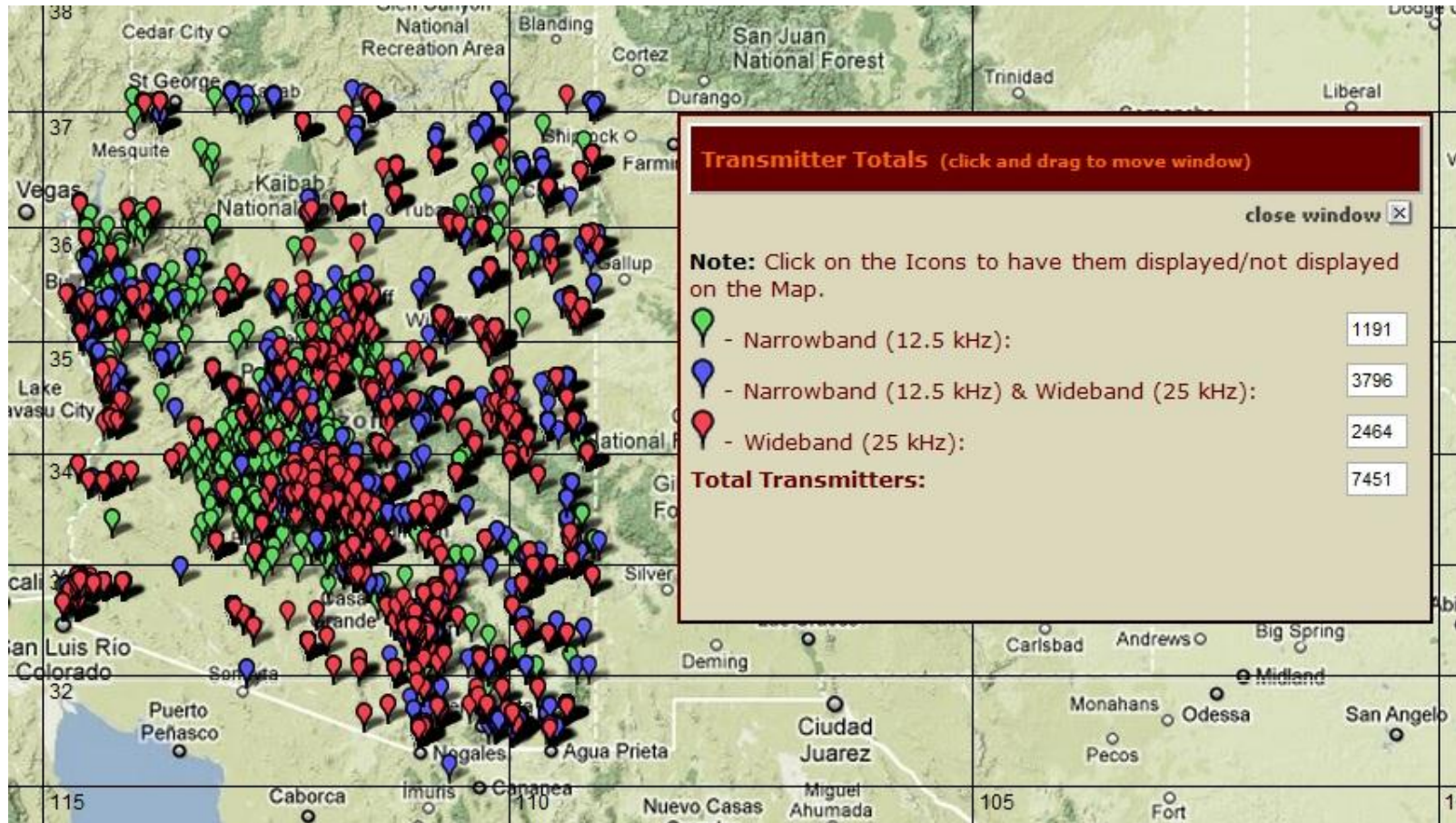
- The Enforcement Bureau's Spectrum Enforcement Division, in conjunction with the Regional and Field Offices, would investigate wideband interference complaints.
- If a violation is found to have occurred, potential sanctions include
 - Admonishments,
 - License revocation, and/or
 - Monetary forfeitures
 - » Up to \$16,000 for each such violation or each day of a continuing violation
 - » Up to \$112,500 for any single act or failure to act.

National Progress to Date



DATE	Total Licenses w/WB Only	Total Licenses in Transition	Total Licenses w/NB Only	Total Licenses
Jul-10	78815	14573	15891	109279
	72.1%	13.3%	14.5%	
May-11	68170	23420	17700	109290
	62.4%	21.4%	16.2%	
Aug-11	63020	27484	18556	109060
	57.8%	25.2%	17.0%	
Nov-11	55435	33195	20033	108663
	51.0%	30.5%	18.4%	

Arizona Licensing Status



• As of January 3, 2012

- ~ 16% Narrowband
- ~ 50% Mixed
- ~ 33% Wideband

Narrowband Licensing Status



- As of January 1, 2012:

		By FRN			
REGION	STATE	# NB or N/W	# WB	Total	% NB
Total		236	287	523	45%
Central	AZ	30	54	84	36%
Eastern	AZ	43	43	86	50%
Northern	AZ	60	70	130	46%
Southern	AZ	41	63	104	39%
Western	AZ	62	57	119	52%

These results are from a licensing perspective only and do not imply any type of narrowband compliance from an equipment standpoint.

Narrowband Licensing Status, cont.



- As of January 1, 2012:

		By # of Fixed Transmitters			
REGION	STATE	# NB or N/W	# WB	Total	% NB
Total		4987	2464	7451	67%
Central	AZ	895	795	1690	53%
Eastern	AZ	693	351	1044	66%
Northern	AZ	1259	408	1667	76%
Southern	AZ	982	578	1560	63%
Western	AZ	1158	332	1490	78%

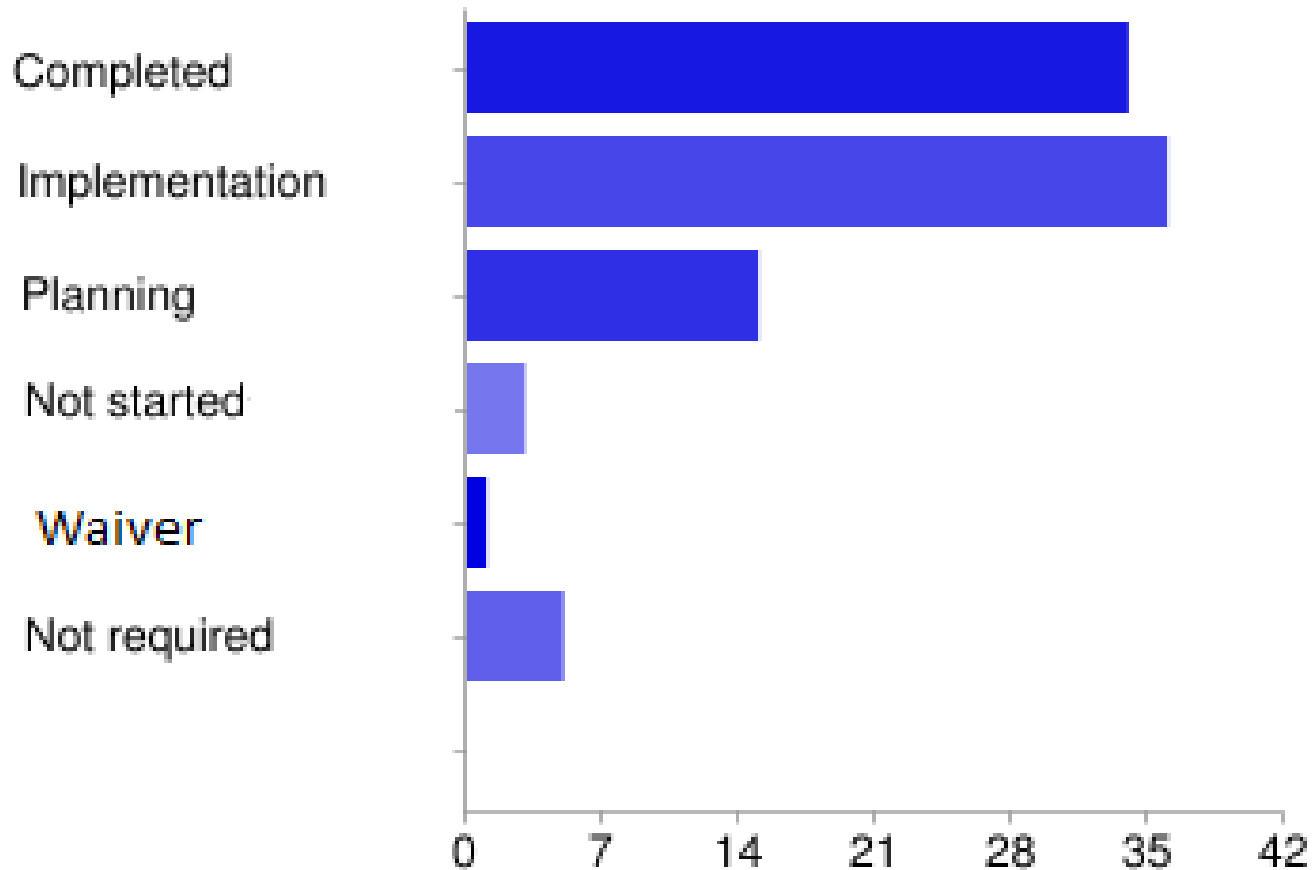
These results are from a licensing perspective only and do not imply any type of narrowband compliance from an equipment standpoint.

Narrowband Survey



- The PSIC Office conducted a survey of stakeholders and Arizona FCC Public Safety License Holders January 3 – 10, 2012.
- The survey included 13 high-level questions relevant to the current status and future plans (if applicable) for the narrowbanding conversion.
- 97 respondents from across Arizona participated in the survey.
- Responses will be reviewed to gauge progress on Narrowband planning and implementation efforts.

What is the status of your narrowbanding conversion?



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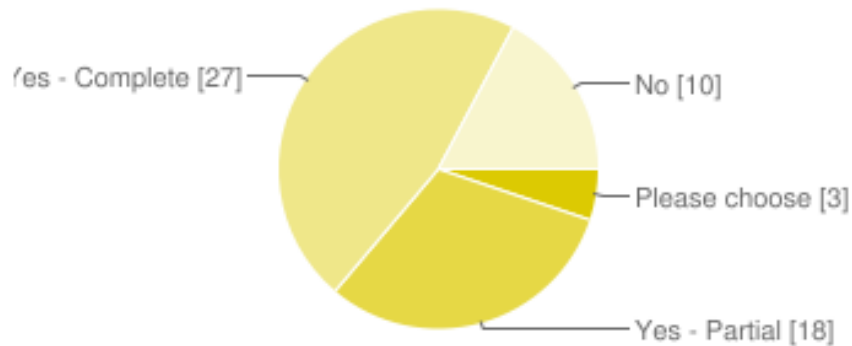


Completed: We have modified our FCC license, reprogrammed all subscriber gear, and are currently operating only in narrowband mode.	34	35%
Implementation Phase: Funding has been identified and equipment is scheduled to be or has been purchased or reprogrammed.	36	37%
Planning Phase: Discussions with surrounding agencies have occurred and we are developing an implementation plan.	15	15%
Not started	3	3%
We plan to request a waiver from the FCC.	1	1%
Not required - We currently operate on or are transitioning to a 700/800 MHz System.	5	5%

Status, cont.

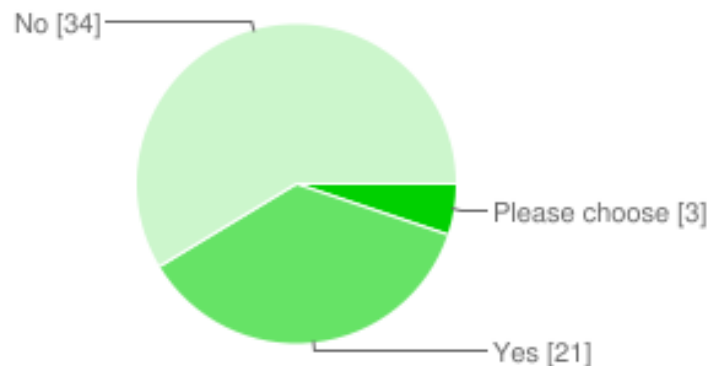


Have you identified funding for conversion to narrowband?



Please choose	3	3%
Yes - Partial	18	19%
Yes - Complete	27	28%
No	10	10%

Do you have a documented migration plan?

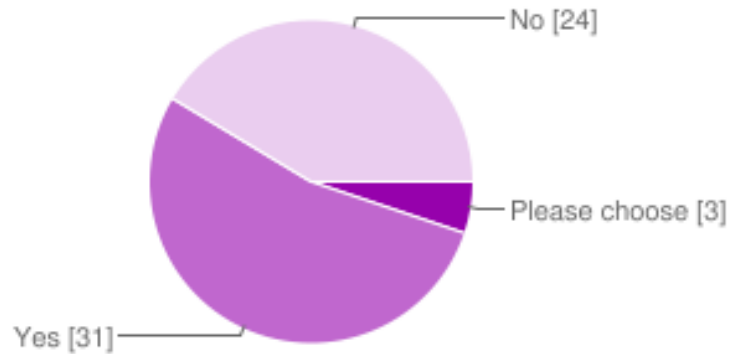


Please choose	3	3%
Yes	21	22%
No	34	35%

Status, cont.

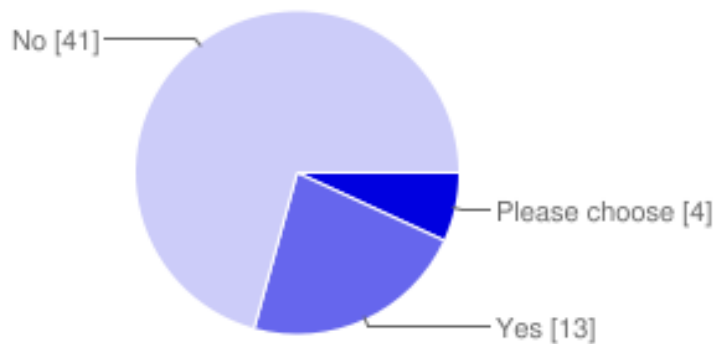


Have you modified your FCC license to meet the narrowbanding requirements?



Please choose	3	3%
Yes	31	32%
No	24	25%

Have you reprogrammed your subscriber gear?

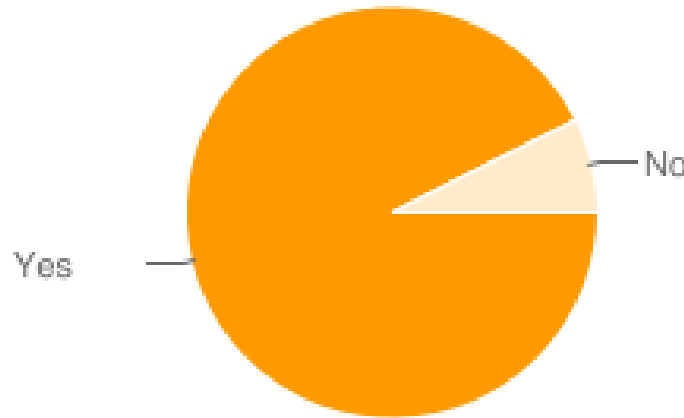


Please choose	4	4%
Yes	13	13%
No	41	42%

Do you intend to submit a waiver to the FCC?



- For those in the Planning or Implementation phase: Will you be completely migrated by January 1, 2013?



- If not, do you intend to submit a waiver to the FCC?
 - Yes - Our waiver has been formally submitted: 2
 - Yes - We have not started drafting the waiver: 3

Meeting the Mandate



- Licensees will need to convert or replace their existing VHF and UHF wideband (25 kHz) systems and update their License with the FCC.
- Options to meet the narrowbanding mandate:
 - Continuing to use analog systems in a narrowband mode
 - Moving to digital radio systems
 - Moving to another frequency band such as 700 or 800 MHz
- Some jurisdictions in Arizona are choosing to join established regional shared systems over upgrading their legacy wideband system.

Narrowbanding Considerations



- Consult your public safety leadership and those who maintain your radio systems.
- Consider "non-voice" radios when reviewing the status of your local radio systems.
- Determine if your system needs re-programming or full replacement.
- Collaborate with neighboring communities to determine their narrowbanding plans.
- Prepare for a slight decrease in the level of system coverage when narrowbanding.
- Modify your FCC licenses to show the new narrowband emission.
- Develop a realistic timeline as well as budget of the costs involved.

Cost and Funding Considerations



- The cost of narrowbanding will vary depending on the nature of each licensee's existing system.
 - Narrowbanding generally does not require a system upgrade, though licensees may combine narrowbanding with other scheduled upgrades or modifications
 - Narrowbanding costs will be more substantial for systems that require additional sites and for older systems that require replacement of existing equipment

Grant Funding



- Many grants that fund interoperable communications equipment allow grant funds to be used for narrowband-related activities, including:
 - Development of narrowband plans
 - Assessment of narrowband compliant assets and capabilities
 - Training associated with narrowband transition
 - Replacement of non-narrowband compliant equipment
 - Acquiring/upgrading tower sites needed to comply with narrowband conversion
 - Reprogramming existing equipment to comply with narrowband conversion

Cost and Funding Considerations



- Many licensees have provided for narrowbanding funding in their existing state/local budgets.
- However, some licensees may require federal funding.
- FCC has been working with federal agencies (including DHS, DOJ, and USDA) to identify potential funding sources.
 - Information and links are posted on the FCC narrowbanding webpage: www.fcc.gov/narrowbanding

FY2012 Grant Funding



- SAFECOM is once again highlighting the importance of narrowbanding in their grant guidance for Federal FY2012 Grant Programs.
 - Priority 2: Statewide Planning for Emergency Communications
 - » Assessment of capabilities needs and remaining gaps (e.g., NECP Goal, narrowband assessments, exercises)
 - Priority 4: Other Integral Emergency Communications Activities
 - » Activities that ensure compliance with the FCC narrowband mandate
 - Priority 5: Standards-based Equipment
 - » Meet the FCC narrowband mandate
- Note: *Some Federal grants do not allow construction or similar ground-disturbing activities. Consult the specific grant guidance and the grant office.*

AZDOHS Grant Information Seminars



- Monday, January 23rd 9:00am – 12:00pm
 - Glendale Public Safety Training Center
 - 11550 W. Glendale Road, Glendale, AZ 85307
- Wednesday, January 25th 9:00am – 12:00pm
 - Flagstaff City Council Chambers
 - 211 W. Aspen Ave, Flagstaff, AZ 86001
- Friday, January 27th 9:00am – 12:00pm
 - Tucson Police Department Westside Service Center
 - 1310 W. Miracle Mile, Tucson, AZ 85705

Moving Forward



- Narrowbanding Compliance will continue to be a focus of the PSIC Office in 2012.
- We are working with the FCC to schedule a Narrowband webcast in Arizona.
- We are coordinating with FCC to reach public safety license holders who have out of date database information.

Resources



- PSIC Website:
www.azpsic.gov/library/narrowbanding/default.htm
 - A number of resources, helpful information and links to additional narrowbanding sites.
- Public Safety Tools Narrowbanding Site:
www.publicsafetytools.info/start_nb_status.php
 - Tool for agencies to review the narrowbanding status of surrounding agencies in their jurisdiction.
- FCC: Guidance For Submission Of Requests For Waiver And Other Matters: www.azpsic.gov/library/narrowbanding/DA-11-1189A1_Waiver_Guidance.pdf
 - This Public Notice provides guidance for licensees that intend to submit requests for waiver of the deadline and sets forth additional information regarding the transition to narrowband technology.

Additional Resources



- DHS Office of Emergency Communications (oeec@hq.dhs.gov)
 - » [A Practical Guide to Narrowbanding](#)
- SAFECOM
 - » <http://www.safecomprogram.gov/SAFECOM/grant/default.htm>
- FEMA
 - » www.fema.gov/grants
- DOJ National Institute of Justice
 - » <http://www.ojp.usdoj.gov/nij/topics/technology/communication/radios/fcc-narrowbanding.htm>
- USDA Rural Development Community Programs
 - » http://www.rurdev.usda.gov/HCF_CF.html
- <http://www.npstc.org/narrowbanding.jsp>
 - » Provides a list (by state) of public safety communications professionals who have volunteered to be points of contact to assist in narrowbanding

FCC Website and Contacts



FCC Narrowbanding Website:

- www.fcc.gov/narrowbanding

FCC Narrowbanding Mailbox:

- narrowbanding@fcc.gov

Public Safety and Homeland Security Bureau Contacts:

- Roberto Mussenden
 - » 202-418-1428
 - » Roberto.Mussenden@fcc.gov
- Zenji Nakazawa
 - » 202-418-7949
 - » Zenji.Nakazawa@fcc.gov



Further Discussion; Questions?

Thank You!

Justin Turner – Justin.Turner@azdoa.gov